

Remarks

In view of the above amendments and the following remarks, reconsideration of the rejections and further examination are requested.

Claims 1, 3, 7, 9 and 11 have been rejected under 35 U.S.C. §102(b) as being anticipated by Fukushima (JP 2000-322818).

Claims 1, 7 and 9 have been amended so as to further distinguish the present invention, as recited therein, from the reference relied on in the above-mentioned rejection. As a result, the above-mentioned rejection is submitted to be inapplicable to the amended claims for the following reasons.

Claim 1 is patentable over Fukushima, since claim 1 recites an optical disc including, in part, a drive information area comprising a plurality of clusters, each cluster comprising a plurality of sectors, each sector having capacity for storing one record of drive-specific information, the plural records of drive-specific information being arranged in an order in which the plural records were recorded with a last-recorded record of the plural records of drive-specific information located in a first sector of a current cluster following a last sector of a previous cluster, new drive specific information being newly recorded to a first sector in a new cluster, and information from all sectors except a last sector in an immediately proceeding cluster being newly recorded to sectors following the first sector in the new cluster which includes the new drive-specific information, the immediately preceding cluster being recorded with all previous records of drive-specific information. Fukushima fails to disclose or suggest these features of claim 1.

According to the present invention, as recited in claim 1, the drive-specific information stored in one cluster is not the same as that stored in another cluster. For example, as illustrated in Figure 5 of the specification, when the first drive-specific information D(1) is produced, it is recorded in the first sector #1 of the first cluster #1. Then, as illustrated in Figure 6 of the specification, when the second drive-specific information D(2) is produced, it is stored in the first sector #1 of the second cluster #2. In this situation, the first drive-specific information D(1) as stored in the first cluster #1 remains unchanged. Also, in cluster #2, the first drive-specific information D(1) is stored in the second sector #2. Next, as illustrated in Figure 7, when the third drive-specific information D(3) is produced, it is stored in the first sector #1 of the third cluster #3. In this situation, the drive-specific information as stored in the first cluster #1 and the

second cluster #2 remain unchanged. Also, in cluster #3, the first and second drive-specific information D(1) and D(2) are stored in the third and second sectors #3 and #2, respectively. It is noted that this manner of handing the newly produced drive-specific information is clearly set forth in claim 1.

According to the present invention as discussed above and set forth in claim 1, the drive information area has such a structure that the information is updated, not by over-writing, but by writing to new area (cluster), resulting in different drive-specific information being stored in a current cluster than the previous cluster. On the other hand, as will be discussed in detail below, Fukushima discloses the updating of information by over-writing in parallel in two locations, resulting in the same drive-specific information being stored twice.

Fukushima discloses an information recording medium including a drive information field 502 including a first drive information field 502a for recording first drive information 521 and a second drive information field 502b for recording second drive information 522. The first and second drive information fields 502a and 502b are used to provide redundancy in case one is rendered unreadable. Each of the first drive information 521 and the second drive information 522 includes two to sixteen record/playback conditions 521a. The record/playback conditions 521a are stored from newest to oldest.

During operation, if it is determined that none of the sixteen record/playback conditions 521a stored in the first and second drive information fields 502a and 502b is acceptable, a new record/playback condition 521a is determined for the information recording medium and the first and second drive information fields 502a and 502b are updated to include the new record/playback condition 521a. The updating of the first and second drive information fields 502a and 502b includes overwriting the oldest previously stored record/playback condition 521a with the new record/playback condition 521a and changing the order of storage of the record/playback conditions 521a accordingly. (See paragraphs [0009] – [0012], [0014], [0015] and [0132]-[0134]).

Based on the above discussion of Fukushima, the following explanation of the operation of Fukushima is provided with reference to Attachment A (ILL. A-C, which are based on Figure 5 of Fukushima) submitted herewith. Further, it is noted that the names of the various portions of the information recording medium of Fukushima have been changed to those used in claim 1

for corresponding elements, so as to more clearly illustrate the differences between claim 1 and Fukushima.

As discussed above, Fukushima teaches the use of two clusters 502a and 502b each having a plurality of sectors 521a. The cluster 502a is for storing drive-specific information 521, and the cluster 502b is for storing drive-specific information 522. However, the drive-specific information 521 and 522 are the same information. In Fukushima, as illustrated in ILL. A, when the first drive-specific information D(1) is produced, it is recorded in the first sector of the first cluster 502a and also in the first sector of the second cluster 502b. Then, as illustrated in ILL. B, when the second drive-specific information D(2) is produced, it over-writes the first drive-specific information D(1) in the first sector of the first cluster 502a and also in the first sector of the second cluster 502b. In this situation, the first drive-specific information D(1) is written in the second sector of the first cluster 502a, as well as in the second sector of the second cluster 502b. Next, as illustrated in ILL. C, when the third drive-specific information D(3) is produced, it over-writes the second drive-specific information D(2) in the first sector of the first cluster 502a and also in the first sector of the second cluster 502b. In this situation, the second drive-specific information D(2) is written in the second sector of the first cluster 502a, as well as in the second sector of the second cluster 502b, and the first drive-specific information D(1) is written in the third sector of the first cluster 502a, as well as in the third sector of the second cluster 502b.

As is clearly understandable from the above detailed explanation of Fukushima, the drive-specific information stored in the clusters 502a and 502b are exactly the same information. The cluster 502b is provided for redundancy, just in case the cluster 502a fails to correctly store the information, for example, due to scratches or dust. This is apparent from paragraphs [0118] - [0122] of Fukushima which state that the drive-specific information 521 is first read from cluster 502a. If the reading is successful, the read drive-specific information 521 is used. If the reading is not successful, then the drive-specific information 522 read from cluster 502b is used. Therefore, Fukushima fails to disclose or suggest a plurality of clusters, each cluster comprising a plurality of sectors, each sector having capacity for storing one record of drive-specific information, the plural records of drive-specific information being arranged in an order in which the plural records were recorded with a last-recorded record of the plural records of drive-specific information located in a first sector of a current cluster following a last sector of a

previous cluster, new drive specific information being newly recorded to a first sector in a new cluster, and information from all sectors except a last sector in an immediately proceeding cluster being newly recorded to sectors following the first sector in the new cluster which includes the new drive-specific information; the immediately preceding cluster being recorded with all previous records of drive-specific information, as recited in claim 1.

Claim 4 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Fukushima in view of Yamagami (US 6,256,282).

Regarding Yamagami, it is relied upon as disclosing an optical disc including a plurality of recording layers each read by a read beam from a same side of the optical disc. However, Yamagami fails to disclose or suggest the above-discussed features of claim 1. As a result, claim 4 is patentable over the combination of Fukushima and Yamagami for the same reasons set forth above in support of claim 1.

Regarding claims 7 and 9, they are patentable over Toshiyuki and Yamagami for reasons similar to those set forth above in support of claim 1. That is, claims 7 and 9 each recite, in part, that plural records of drive-specific information are arranged in an order in which the plural records were recorded with a last-recorded record of the plural records of drive-specific information located in a first sector of a current cluster following a last sector of a previous cluster, and at a time of recording new drive-specific information, the new drive-specific information is written to a first sector in a new cluster, and information from all sectors except a last sector in an immediately proceeding cluster is written to remaining sectors following the first sector in the new cluster which includes the new drive-specific information, the immediately preceding cluster being recorded with all previous records of drive-specific information, which features are not disclosed or suggested by the references.

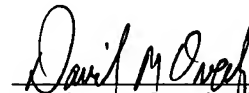
Because of the above-mentioned distinctions, it is believed clear that claims 1, 3, 4, 7, 9 and 11 are patentable over the references relied upon in the rejections. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 1, 3, 4, 7, 9 and 11. Therefore, it is submitted that claims 1, 3, 4, 7, 9 and 11 are clearly allowable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that there are issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

Takashi ISHIDA et al.

By:



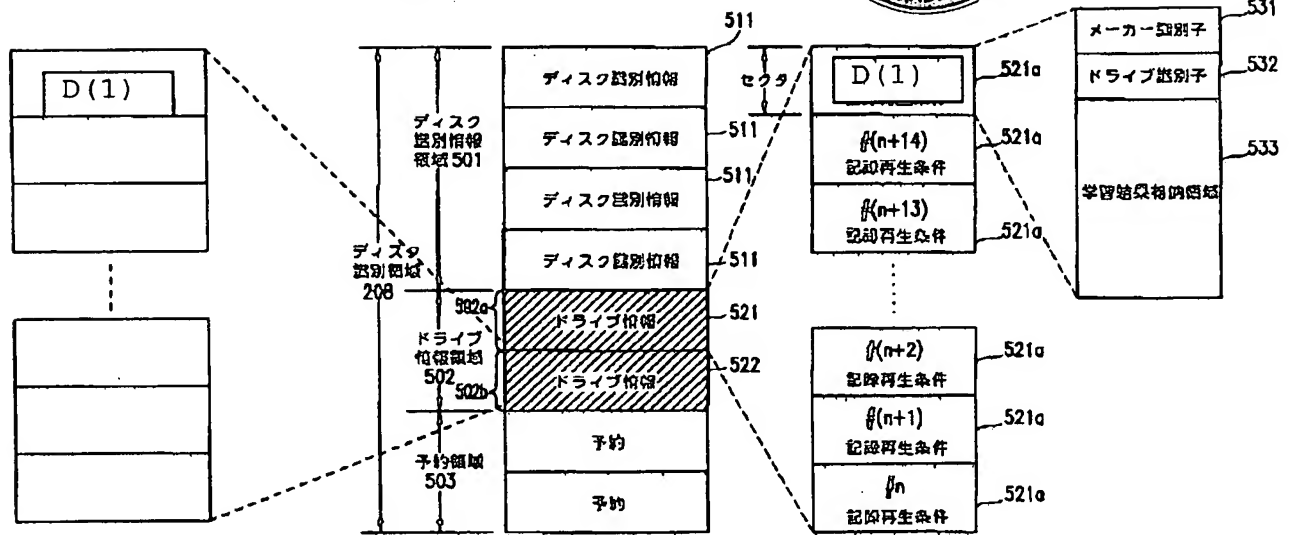
David M. Ovedovitz

Registration No. 45,336

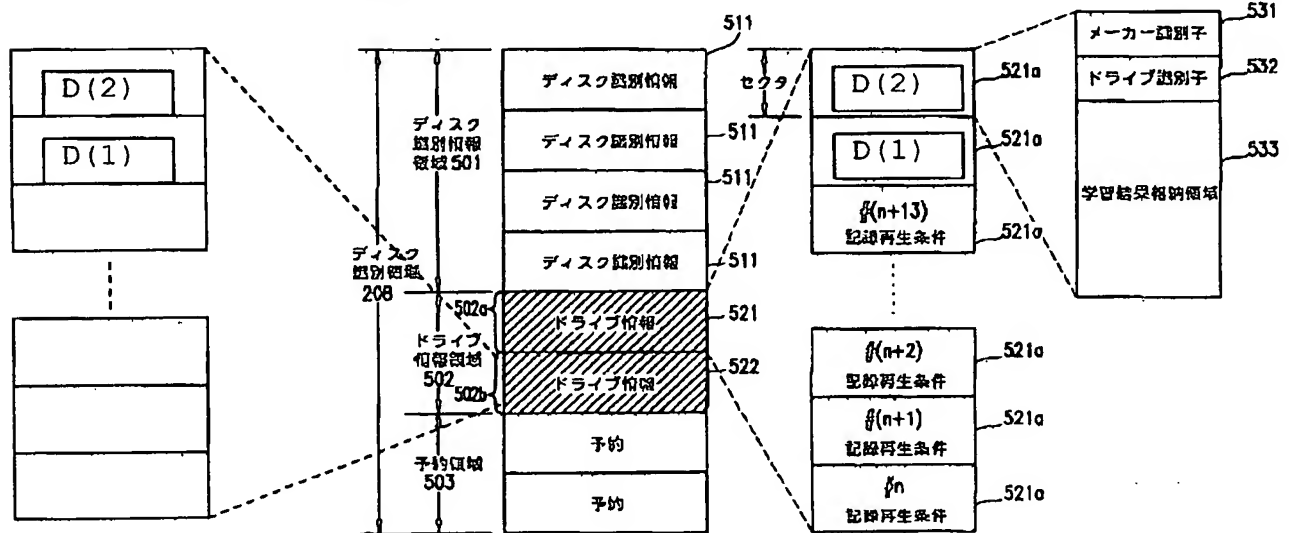
Attorney for Applicants

DMO/jmj
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
November 13, 2007

ILL. A



ILL. B



ILL. C

